IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

BRIDGESTONE SPORTS CO., LTD., and BRIDGESTONE GOLF, INC., Plaintiffs, v. ACUSHNET COMPANY, Defendant.	C.A. No. 05-132 (JJF) REDACTED – PUBLIC VERSION

BRIDGESTONE'S ANSWERING CLAIM CONSTRUCTION BRIEF

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TABLE OF CONTENTS

Page

TABLE OF AUTHORITIES

Cases

I. NATURE AND STAGE OF THE PROCEEDING

A *Markman* hearing is scheduled for November 29, 2006. Plaintiffs Bridgestone Sports Co., Ltd., and Bridgestone Golf, Inc. ("Bridgestone") and Defendant Acushnet Company ("Acushnet") filed Opening Claim Construction Briefs on November 2, 2006. D.I. 229 and 230. Bridgestone submits this Answering Claim Construction Brief in response to Acushnet's Opening Claim Construction Brief.

II. SUMMARY OF ARGUMENT

Bridgestone does not believe that a majority of the terms in dispute between the parties require a definition, because they are clear on their face. In fact, of the sixteen discrete terms in the patents-in-suit for which the parties request definitions, Bridgestone proposes a "plain and ordinary meaning" for nine. Bridgestone proposes separate definitions only for:

- terms that have definitions informed by Federal Circuit precedent, such as "about" in Bridgestone's '652 Patent;
- terms that have a meaning explained by the applicants, such as "an ionomer resin" in Bridgestone's '817 Patent and "resilience index" in Acushnet's '705 Patent;
- terms that have a specific definition in the claim itself that Acushnet seeks to change, such as "edge" in Acushnet's '861, '587, and '367 Patents; and
- terms that are ambiguous, such as "a material farmed [sic] from the conversion reaction …" and "the material" in Acushnet's '705 Patent and "determining … satisfy the following relationship" in Acushnet's '861 Patent.

In contrast, Acushnet's proposed definitions consistently violate fundamental principles of claim construction, because Acushnet:

- disregards clear claim language to propose tortured redefinitions of claims;
- improperly imports details taken from exemplary embodiments of the respective patent specifications into proposed definitions;
- proposes rewriting clear claim language simply to "assist" the jury's understanding, or because Bridgestone has allegedly provided "inconsistent responses" to requests for admission; and

- requests definitions based on validity and infringement issues not properly before the Court.

Additionally, Acushnet repeatedly proffers "evidence" in support of its proposed constructions consisting solely of attorney argument – not evidence from the intrinsic record or extrinsic sources identified by the Federal Circuit.

III. STATEMENT OF FACTS

Bridgestone's Opening Claim Construction Brief explained the history of golf ball technology and the basic structure of golf balls. D.I. 229 at 2-3. Acushnet's Opening Brief also provided a short statement of what it alleged to be the relevant technology. D.I. 230 at 2-4.

Bridgestone generally agrees with Acushnet's position that the "cores [are] made from one or more polybutadiene rubbers," and that both parties "manufacture the solid cores of their products by polymerizing polybutadiene rubber in a mold with a number of different ingredients." D.I. 230 at 2-3. This "polymerizing" is performed by heating the core in the mold, and is also known as "curing." D.I. 230 at 3 and 21.

Bridgestone also agrees that both parties manufacture certain of the solid cores of their products using a mixture of polybutadiene and an organosulfur compound – in this case a zinc salt of pentachlorothiophenol ("ZnPCTP"). D.I. 230 at 3. Acushnet, however, fails to explain that the benefits of the addition of an organosulfur compound to a golf ball core were discovered, and first brought to market, by Bridgestone. Indeed, this is the very technology embodied in the '652 Patent at issue in this litigation.

Acushnet's allegation that "[t]he golf ball art is very crowded" (D.I. 230 at 2) is not supported. Acushnet's indication that 9,430 U.S. Patents granted since 1976 include the term "golf ball" in its specification (D.I. 230 at 2, fn. 1) vastly overstates the amount of patents actually directed to solid "golf balls." The number includes wound technology which has been abandoned in favor the technology pioneered by Bridgestone. Moreover, searching for the term "golf ball" in a specification returns patents that only mention golf balls in passing, such as those directed to golf clubs, golf methods, golf video

games, etc. A more appropriate search would be for U.S. Patents that include "golf ball" in the title. Such a search returns only 2,718 patents. Ex. A. Further, "crowded" is a relative term for which Acushnet fails to provide a frame of reference.[1]

IV. ARGUMENT

A. BRIDGESTONE PATENTS-IN-SUIT

1. The '652 Patent

The '652 Patent (D.I. 229, Ex. A) represents a significant discovery that improves golf ball performance by adding certain compounds – organosulfurs – to the rubber material from which the core is formed. D.I. 229, Ex. A, col. 1:43-57. Acushnet's allegation that this patent seeks "to claim well-known properties of rubbers or inherent properties of rubbers used in golf ball cores …" (D.I. 230 at 8) is unfounded and inaccurate.

a. "a base rubber selected from the group consisting of polybutadiene rubber, natural rubber, polyisoprene rubber, and styrene-butadiene rubber"

Both parties agree that this term is in the form of a "Markush group."[2] D.I. 229 at 8; D.I. 230 at 8. The group provides a list of rubbers that may make up the "base rubber." But, Acushnet seeks to limit this group to "one and only one" of the listed rubbers – a limitation completely contrary to the intrinsic evidence.

Bridgestone maintains that this term be afforded its plain and ordinary meaning (*e.g.*, that a base rubber can include any of the rubbers articulated, and blends of those rubbers) consistent with the intrinsic record of the '652 Patent. It is axiomatic that terms must be given their ordinary meaning unless it is

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1. [1] For the Court's benefit, searches of U.S. Patents granted since 1976 with "semiconductor" in the title produces a result of 64,574. Similar searches for "telephone," "tire," "shoe," and "screw" produce results of 13,224, 11,342, 8,608, and 4,489, respectively. Ex. B.

[2] A Markush group lists specified alternatives in a patent claim, typically in the form: a member selected from the group consisting of A, B, and C. *Gillette Co. v. Energizer Holdings, Inc.*, 405 F.3d 1367, 1372 (Fed. Cir. 2005). By using a Markush group, the inventor "has made a representation that for the purposes of the claimed invention the elements of the group are equivalents." *In re Skoll*, 523 F.2d 1392, 1397 (CCPA 1975).

apparent that the inventor used them differently in the patent. *Intellicall, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384, 1387 (Fed. Cir. 1992).

In contrast, Acushnet seeks to rewrite, and hence limit, this term as, "one and only one base rubber selected from the group of polybutadiene rubber, natural rubber, polyisoprene rubber, and styrene-butadiene rubber." D.I. 230 at 8. Acushnet also asks this Court to rule that "one and only one of the base rubbers be used in an infringing product." D.I. 230 at 8. In the face of express claim language reciting that blends of rubber make up the "base rubber" and preferred embodiments disclosing the same, Acushnet's proposed interpretation is improper, and has no legal or factual support.

Acushnet relies exclusively on *Abbott Laboratories v. Baxter Pharmaceutical Products, Inc.*, 334 F.3d 1274, 1280 (Fed. Cir. 2003) to support its position, alleging that *Abbott* stands for the proposition that an indefinite article (*e.g.*, "a") used in conjunction with a Markush grouping does not receive its general meaning of "one or more," but rather indicates that only one member of the Markush group can be used. D.I. 230 at 9. Acushnet argues that *Abbott* dictates that the disputed term – "a base rubber" – should be limited to "one and only one base rubber" because, according to Acushnet, "[i]n the '652 patent, there is … no express indication in the claims that more than one member of the Markush group may be selected." D.I. 230 at 9.

Acushnet's argument is incorrect, because the '652 Patent claims clearly recite that blends of different types of rubbers are included in the "base rubber." Specifically, in the '652 Patent,

- Claim 1 recites, in part: "[a] solid golf ball…comprising a rubber composition containing 100 parts by weight of a base rubber selected from the group consisting of polybutadiene rubber, natural rubber, polyisoprene rubber and styrene-butadiene rubber." D.I. 229, Ex. A. col. 5:5-11.

- Claims 6 and 7 respectively specify that "said base rubber is a polybutadiene rubber" and "said polybutadiene rubber is a poly(1,4-butadiene) rubber containing at least 40 mol % of cis-1,4 bond." D.I. 229, Ex. A. col. 5:4-8.

- Claim 9 specifies that "said base rubber comprises at least 80% by weight of said poly(1,4-butadiene) rubber." D.I. 229, Ex. A. col. 5:12-14.

- Claim 10 (which depends from claims 6, 7 and 9) specifies that "said poly(1,4-butadiene) rubber is **blended** with a natural rubber, a polyisoprene rubber or [sic] a styrene-butadiene rubber." D.I. 229, Ex. A. col. 6:15-18 (emphasis added).

Claim 10 expressly states that the polybutadiene rubber is blended with one of the other rubbers identified in the Markush group. This language is an express statement that the rubbers of the Markush group may be blended in any manner. Importantly, claim 10 has the type of qualifying language that *Abbott* mentions, and which Acushnet does not consider. To adopt Acushnet's argument would render all of claims 6, 7, 9 and 10 a nullity, and that is clearly inappropriate.[3]

Further, as even Acushnet concedes (D.I. 230 at 9), the specification discloses preferred embodiments with cores made from blends of the different rubbers listed in claim 1:

> The base rubber used herein may be any desired rubber which is commonly used in conventional one-piece golf balls and cores of multi-layered golf balls. Polybutadiene rubbers, especially poly(1,4-butadiene) rubbers containing at least 40 mol %, preferably 80 to 100 mol % of cis-1,4 bond are preferred because of high rebound resilience, extrusion moldability, and high strength after vulcanization. If desired, the poly(1,4-butadiene) rubbers may be blended with natural rubber, polyisoprene rubber, styrene-butadiene rubber or the like. It is desired that at least 80% by weight of poly(1,4-butadiene) rubber be present in the base rubber because base rubbers containing less amounts of poly(1,4-butadiene) rubber often fail to take advantage of the rebound resilience of polybutadiene rubber.

D.I. 229, Ex. A, col. 2:22-36 (emphasis added). Specific examples of such blends are shown in Table 1. D.I. 229, Ex. A, col. 4:7-22. Thus, both the claims and the specification of the '652 Patent indicate that blends of the listed rubbers may be used.

Secondly, the instant facts are different from the facts in *Abbott* and hence this decision is inapposite. In *Abbott*, the Federal Circuit construed several claims in U.S. Patent No. 5,990,176, such as:

> 1. An anesthetic composition comprising: a quantity of sevoflurane; and a Lewis acid inhibitor in an amount effective to prevent degradation by a Lewis acid of said quantity of

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[3] The review of all of the claims is instructed by the Federal Circuit, "[b]ecause claim terms are normally used consistently throughout the patent, the usage of a term in one claim can often illuminate the meaning of the same term in other claims." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005).

> sevoflurane, said Lewis acid inhibitor selected from the group consisting of water, butylated hydroxytoluene, methylparaben, propylparaben, propofol, and thymol.

The claim in question requires "a Lewis acid inhibitor in an amount effective" and specifies that "said Lewis acid inhibitor [is] selected from the group consisting of water, butylated hydroxytoluene, methylparaben, propylparaben, propofol, and thymol" (emphasis added). As another court has observed:

> [this] Markush group … required the presence of an 'amount effective' of a Lewis acid inhibitor selected from a group … [and the] patentee attempted to prove infringement by combining two Lewis acid inhibitors to prove that the combination of those substances in the accused product was an 'amount effective.'
>
> Thus, the Federal Circuit indicated that "the Markush group at issue did not permit mixtures of the individual members of the group," and "that the patentee, to prove literal infringement, would need to show that only one member of the group was present in an 'amount effective' to meet the claim limitation."
>
> However, it "did not hold that the presence of any Lewis acid inhibitor, together with an 'amount effective' of a listed Lewis acid inhibitor, would defeat a claim of literal infringement.

Maxma v. ConocoPhillips Inc., 2005 U.S. Dist. LEXIS 34020 (E.D. Tex. 2005). Hence, the Federal Circuit's holding in *Abbott* is fact-specific inasmuch as the "Lewis acid inhibitor" was required to be present in "an amount effective." That is not the case in claim 1 of the '652 Patent, which is open ended with respect to "[a] solid golf ball…comprising a rubber composition containing 100 parts by weight of a base rubber..."

Additionally, as the court in *Maxma* indicated, *Abbott* should not be read as holding that no other Lewis Acid inhibitor could be present in the mixture. Rather, *Abbott* simply held that only one of the Lewis Acid inhibitors can make up the "effective amount." Thus, Acushnet's argument that "one and only one of the base rubbers be used in an infringing product" is unsupported.[4]

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1. [4] Moreover, Acushnet's proposed definition should not be read as limiting any of the listed rubbers – polybutadiene rubber, natural rubber, polyisoprene rubber, and styrene-butadiene rubber – to only one type or grade of such rubbers. For example, "polybutadiene rubber" can be one grade of polybutadiene rubber, or a mixture of different grades of polybutadiene rubber. "Rubber" has both a singular and plural meaning.

Accordingly, Acushnet's proposed definition is unsupported by the clear claim language of the '652 Patent, the specification of the '652 Patent, and the applicable case law. Accordingly, Bridgestone requests that the Court adopt a plain and ordinary meaning for this disputed term.

b. "about"

Bridgestone maintains that the term "about" be construed according to its plain and ordinary meaning, which is derived directly from Federal Circuit precedent, "approximately, in the stylistic and technological context in which it is used." Terms must be given their ordinary meaning unless it is apparent that the inventor used them differently in the patent, *see Intellicall,* 952 F.2d at 1387, and claim terms might not be technical terms of art, and may not require elaborate interpretation, *see Brown v. 3M,* 265 F.3d 1349, 1352 (Fed. Cir. 2001).

The Federal Circuit has repeatedly addressed the meaning of the term "about." It has held that "about" has a plain and ordinary meaning of "approximately." *See Merck & Co. v. Teva Pharms. USA, Inc.*, 395 F.3d 1364, 1372 (Fed. Cir. 2005). Additionally, the Federal Circuit has instructed that the term "about" should be "interpreted in its technologic and stylistic context," *Pall Corp. v. Micron Separations*, 66 F.3d 1211, 1217 (Fed. Cir. 1995), or be "understood in light of the technology embodied in the invention," *Modine Mfg. Co. v. I.T.C.*, 75 F.3d 1545, 1554 (Fed. Cir. 1996). *See also Andrew Corp. v. Gabriel Elec., Inc.*, 847 F.2d 819, 821-22, (Fed. Cir. 1988); *W.L. Gore & Assoc. Inc. v. Garlock, Inc.*, 842 F.2d 1275, 1280 (Fed. Cir. 1988).

This precedent, when read as a whole, supports Bridgestone's proposed definition – and totally contradicts Acushnet's allegation that Bridgestone's proposed definition "has no basis in law." D.I. 230 at 11. Further, Bridgestone's proposed definition is completely consistent with the intrinsic evidence related to the '652 Patent, for at least the reasons discussed in Bridgestone's opening brief.[5] D.I. 229 at 11-12.

1. [5] Acushnet alleges that one of the inventors did not know what "stylistic" and "technological" context meant. D.I. 230 at 11. But, this is irrelevant since Bridgestone's definition is informed by Federal Circuit precedent, not the '652 Patent. When asked what his understanding of "about

Ignoring the clear Federal Circuit precedent and the intrinsic evidence, Acushnet seeks to define "about" as "approximately, as would be understood by those skilled in the art to mean the precision with which the quantity the term is used to modify can be measured." D.I. 230 at 10. Thus, Acushnet seeks to improperly add a limitation – that of a specific measurement precision – to the plain and ordinary meaning of "about."

Acushnet does not cite a single piece of intrinsic or extrinsic evidence within the '652 patent to support its position. Rather, Acushnet relies entirely on two Federal Circuit cases – *Modine* and *BJ Services Co. v. Halliburton Energy Services*, 338 F.3d 1368 (Fed. Cir. 2003) – whose decisions are specific to the facts of their respective cases. Neither case sets forth a rule of law on point.

Acushnet first cites *Modine* for the proposition that the addition of a measurement precision limitation to the plain meaning of about:

> is supported by Federal Circuit precedent, which "illustrates the fact-dependency of determinations of the technologic scope of 'about' and similar terms, depending on their contexts ***and the precision*** or significance ***of the measurements used***." *Modine Mfg. Co. v. I.T.C.*, 75 F.3d 1545, 1554 (Fed. Cir. 1996) (emphases added).

D.I. 203 at 11 (***emphasis*** in original). Acushnet's allegation that the Federal Circuit has defined "about" as being "dependent upon measurement precision" is a misreading of *Modine*.

Modine actually supports Bridgestone's proposed definition of "about," because it holds:

> broadening usages as "about" must be given reasonable scope; they must be viewed by the decisionmaker as they would be understood by persons experienced in the field of the invention. … Although it is rarely feasible to attach a precise limit to "about," the usage can usually be understood in light of the technology embodied in the invention. When the claims are applied to an accused device, it is a question of technologic fact whether the accused device meets a reasonable meaning of "about" in the particular circumstances.

Modine 75 F.3d at 1554. Thus, *Modine* actually holds: (1) that the meaning of "about" must be given a reasonable scope; and (2) that the finder of fact can look to the "technologic fact" when determining

1. two" was, the inventor answered "about two," and suggested that "about" could be looked up in a dictionary. Ex. C at 29-30.

whether an accused device meets such a reasonable scope. It is this finding of fact that *Modine* addresses in the portion cited by Acushnet, *i.e.*, that the finder of fact can consider: (1) the context; and (2) the precision or significance of the measurements used in conjunction with "about" to determine infringement. For example, in claim 1 of the '652 Patent, the claim language itself demonstrates varying precision and significance, *e.g.*, in the phrase "about 0.05 to about 2" "about" is used in conjunction with a first amount specified to hundredths ("0.05") and a second amount specified merely to ones ("2").

Turning to *BJ Services*, Acushnet argues (D.I. 230 at 11):

> the disputed claim term was "a [C* value] of about 0.06 percent by weight." *Id.* at 1372. The district court held, and the Federal Circuit affirmed, that the term "about" was "intended to encompass the range of experimental error that occurs in any measurement." *Id.* at 1372-73.

That is incorrect, as Acushnet misstates the holding of *BJ Services*. Neither the Federal Circuit nor the trial court defined the term "a C* value about 0.06 percent by weight." Rather, in the district court, the parties "agreed that the jury should be instructed to give 'about 0.06' its plain and ordinary meaning." *BJ Servs.*, 338 F.3d at 1373 (emphasis added). The Federal Circuit did not disagree. Bridgestone requests the same here.

Moreover, the question addressed by the Federal Circuit in *BJ Services* was not whether "about 0.06" was defined correctly. Rather, the Federal Circuit considered the correctness of the jury's determination that the term "a C* value about 0.06 percent by weight" – with its plain and ordinary meaning – was enabled, definite, and valid over prior art disclosing a C* value of 0.077. In this regard, the Federal Circuit looked to expert testimony offered by the patentee at trial. The expert testimony consisted of indications that one of skill would understand how to measure the C* value, and that the word "about" in the term "a C* value about 0.06 percent by weight" was included to comprehend measurement error. The Federal Circuit held that the jury's determination was not incorrect. *BJ Servs.*, 338 F.3d at 1374.

Thus, Acushnet's proposed definition is not supported by any intrinsic evidence, extrinsic evidence, or Federal Circuit precedent. Accordingly, Bridgestone requests that the Court adopt its definition of "about" as "approximately, in the stylistic and technological context in which it is used."

c. "about" as it relates to Acushnet's products

Claim 1 recites "[a] solid golf ball" that includes a rubber composition having "about 0.05 to about 2 parts by weight of a sulfur compound." Acushnet concedes that [redacted] D.I. 230 at 10. Bridgestone believes it is improper to consider the accused products in a claim construction hearing. *Jurgens v. McKasy*, 927 F.2d 1552, 1560 (Fed. Cir. 1991). Nonetheless, to the extent it is necessary to respond, Acushnet learned [redacted]

2. The '852 Patent

The terms "a thickness of at least 1 mm" (concerning the intermediate layer) and "a thickness of 1 to 3 mm" (concerning the cover) in claim 1 of the '852 Patent (D.I. 229, Ex. B) are clear on their face and should be afforded their plain and ordinary meaning. The intrinsic evidence does not afford any special meaning to these terms, which are simple, straightforward, and used in everyday parlance. Terms must be given their ordinary meaning unless it is apparent that the inventor used them differently in the patent, *see Intellicall,* 952 F.2d at 1387, and terms might not be technical terms of art, and may not require elaborate interpretation. *See Brown,* 265 at F.3d 1352.

Acushnet concedes that "under ordinary circumstances, Acushnet would agree that the plain and ordinary meaning should govern." D.I. 230 at 24. Bridgestone believes that such ordinary circumstances

apply here. These terms are precise to the level recited – "1 mm" and "3 mm," and are not ambiguous.[6] Thus, the Court's interpretation of these terms is not needed.

Despite Acushnet's concession of clarity, it seeks to rewrite the disputed terms to read "a thickness that is no less than 1.0 mm," and "a thickness that is no less than 1.0 mm and is no greater than 3.0 mm." Acushnet's redefinition adds degrees of precision different from that claimed, and inconsistent with the intrinsic record.[7] Such a redefinition is proscribed by Federal Circuit precedent. *See, e.g., Modine*, 75 F.3d at 1551 ("[i]t is usually incorrect to read numerical precision into a claim from which it is absent"). This Court has similarly rejected attempts to add a level of precision to a term different than that claimed. *See e.g., E. I. Du Pont de Nemours & Co. v. Phillips Petroleum Co.*, 711 F. Supp. 1205, 1222 (D. Del. 1989) ("0.95 does not mean 0.9500 or anything more precise. While density may be accurately ascertained to four significant figures, … and, in fact, DuPont reported density data to four significant figures in the specification, no density limitation in any claim of the '698 patent is so precise. Nor is any range of densities for the invention described in the specification with such precise limits").

Courts have found that the plain and ordinary meaning of a numerical limitation is determined by the number of significant figures used for that term. In *San Huan New Materials High Tech v. I.T.C.*, 161 F.3d 1347, 1361 (Fed. Cir. 1998), the Federal Circuit agreed with the I.T.C.'s finding that a claim that stated a range of "30 to 36 weight percent TRE" read on magnets having TRE contents of 36.31% and 36.45% because the claims do not require accuracy even to one decimal place, holding that "it was not shown to be error, legal or scientific, for the Commission to recognize these limits of accuracy, and to round the measured weight percentages to the nearest integer." *See also Viskase Corp. v. Am. Nat'l Can*

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1. [6] Acushnet consistently confuses the difference between terms which are definite, and the actual precision of those definite terms. Precision is determined according to the number used. 5.00 mm is more precise than 5.0 mm. 5.0 mm is more precise than 5 mm. Nevertheless, each of 5.00, 5.0 and 5 mm are definite, because they define an actual boundary to the level of their precision.

[7] The level of precision is increased both by the added language (changing "at least" to "no less than" and "to" to "is no less than… and is no greater than") and the added significant digit ("1 mm" to "1.0 mm" and "3 mm" to "3.0 mm").

Co., 261 F.3d 1316, 1320 (Fed. Cir. 2001) ("[t]he district court construed the density term 'about 0.91 g/cm3' to mean densities between 0.905 and 0.914, based on the reasoning that numbers in this range would be rounded to 0.91. We agree that this is a standard scientific convention when a number has not been carried to the next mathematically significant figure."). *See also Air Prods. & Chems., Inc. v. Chas. S. Tanner Co.*, 1983 U.S. Dist. LEXIS 17243 (D.S.C. 1983) ("[t]he claimed range is '1 to 2.5.' Scientifically, because the number '1' is stated to only one significant figure, as opposed to 1.0, it includes values between 0.51 and 1.49"). These cases show that Acushnet's proposed construction is improper, and unduly limiting *vis-à-vis* the plain and ordinary meaning of the disputed terms.

These cases also demonstrate that the recited cover thickness – "1 to 3 mm" – is not limited precisely to 1.0 mm or 3.0 mm, but mathematically encompass a range less than 1.0 mm and greater than 3.0 mm. In some cases "1" may include 0.51 and "3" may include 3.49. By drafting the claims to only one significant figure and not 1.0 or 3.0, the inventors clearly intended to encompass a broader range than Acushnet alleges – as the plain and ordinary meaning dictates.

Looking to the intrinsic record, both claim 1 and the specification identify thicknesses of "1 mm" and "3 mm," not "1.0 mm" and "3.0 mm." D.I. 229, Ex. B, cols. 3: 28-29; 3:59; 7:3-10. Further, the words used to define the applicable ranges – "at least" and "to" – are used both in the claims and specification in accordance with their everyday usage. Still further, various exemplary embodiments of the golf ball within the patent specification show cover and intermediate layer thicknesses with a higher level of precision – showing that the applicants could have been more precise with the claimed ranges had they wished to do so, but they chose not to be.

Acushnet does not even attempt to support its proffered rewriting of the terms "a thickness of at least 1 mm" and "a thickness of 1 to 3 mm" by citation to any portion of the intrinsic record (or even to accepted forms of extrinsic evidence). Rather, the only reason advanced by Acushnet for not agreeing to a plain and ordinary meaning for these terms is that Bridgestone has allegedly made "seemingly contrary

responses" to requests for admission. D.I. 230 at p. 27. The discovery responses are not contrary, but in any event this is not a proper basis for requesting a Court to construe a claim term.[8]

As an additional matter, the question Acushnet poses for the Court to answer – "whether the construction of 'at least 1 mm' and '1 to 3 mm' encompasses any values outside the stated ranges" (D.I. 230 at p. 27) – is not the issue decided in a claim construction brief. The question is whether the terms "a thickness of at least 1 mm" and "a thickness of 1 to 3 mm" should be given their plain and ordinary meaning, or whether they should be rewritten to include precision that is not in the intrinsic evidence.

3. The '817 Patent

Bridgestone maintains that the term "said cover consists of an ionomer resin as a resin component" be construed as "the resin component in the cover is ionomer resin," a construction consistent with the intrinsic evidence related to the '817 patent (D.I. 229, Ex. C).[9]

On the other hand, Acushnet advances at least two different definitions with respect to this term. Acushnet first proposes that "'consists of' means that the resin component of the cover includes only one ionomer resin and excludes other resins or blends of ionomer resins." D.I. 230 at 17. This is the definition Acushnet proposed in the Joint Claim Construction Chart. D.I. 228 at 12. However, Acushnet also proposes that this term be construed as "the cover includes only one grade of ionomer resin and that is the only resin component in the golf ball cover."[10] D.I. 230 at 20 (emphasis added). Both definitions are incorrect and inconsistent with the intrinsic record because both would exclude every single exemplary embodiment disclosed in the '817 patent.

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8 Bridgestone is unaware of, and Acushnet has failed to cite, any Federal Circuit precedent that permits a Court to consider "seemingly contrary responses" to requests for admission while construing claim terms.

9 Both parties agree that the "resin component" does not include other components of a cover, *e.g.*, colorants or fillers.

10 A "grade" of resin is a particular "brand," such as "Himilan 1650" and "Surlyn 8120" listed in the '817 Patent. D.I. 229, Ex. C, col. 5:40-43.

The parties agree that the term in question uses the phrase "consists of" and that "consists of" is a term of art used to signify a "closed" list. D.I. 230 at 18 and D.I. 229 at 15. Such a "closed" transition phrase generally "excludes any element step, or ingredient not specified in the claim." *Georgia-Pacific Corp. v. United States Gypsum Co.*, 195 F.3d 1322, 1327 (Fed. Cir. 1999). But, the issue then turns to how to construe "consisting of" as it applies to the remaining language of the term – "an ionomer resin as a resin component."

Bridgestone submits that the correct interpretation of this term is one that applies the "consisting of" language to the entire phrase "an ionomer resin as a resin component." In other words, the "consisting of" limits what the resin component of the cover can be – in this case, to an ionomer resin. Acushnet seems to agree, but argues that the indefinite article "an" before "ionomer resin" must be read to limit the scope of "an ionomer" to "only one ionomer resin" or, even more to Acushnet's liking, "only one grade of ionomer resin." Neither limitation to the scope of this term is proper.

"Resin," as used in claim 1 of the '817 Patent, has both a singular and plural meaning. A "resin" can be a single resin grade or a mixture of two resin grades. Such a use is confirmed in many other patents, such as U.S. Patent No. 5,609,532, which indicates the use of "an ionomer resin (a 50/50 mixture of Surlyn1706/Surlyn 1605 …)." Ex. D, col. 4:60-62.[11] An analogy is provided by the term "oil" – *i.e.*, an "oil" made from two different name brands of oil is still "an oil." Such an interpretation is the only reasonable interpretation of "an ionomer resin" in the '817 Patent, because each of the exemplary embodiments disclosed in Table 3 of the '817 Patent utilizes an ionomer resin in its cover that is made of a mixture of two ionomeric resin grades.[12] What is important is that the cover be made of an ionomer resin, whether it made from one grade or blends of ionomer resins.

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[11] Also *see*, *e.g.*, U.S. Patent No. 5,496,034, which states that a cover is formed by using "the following ionomer resin" and then indicates that the resin is one of five mixtures of ionomer resin grades. Ex. E, col. 4:21-43.

[12] Further, what is claimed in this instance is the final product, *i.e.*, the golf ball itself, that includes a cover with an ionomeric resin component, not how it is made, *i.e.*, by mixing two different ionomers.

In contrast, Acushnet's proposed limitation of "an ionomer resin" to "only one ionomer resin" or "only one grade of ionomer resin" would exclude every single exemplary embodiment disclosed in the '817 patent. D.I. 229, Ex. C, col. 5:16-42 and Table 2. An interpretation that excludes all such exemplary embodiment "is rarely, if ever, correct and would require highly persuasive evidentiary support," *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996). There is no basis to limit the disputed language in the manner proposed by Acushnet.

First, "resin" has both a singular and plural meaning. Thus, Acushnet's argument that "[t]he applicant could have claimed a cover made from a blend of ionomer resins" is unpersuasive, because it would have been redundant.[13] Second, when the applicants amended claim 1 to add the feature "said cover consists of an ionomer resin as a resin component," they specifically stated that "[s]upport for the amendments can be found in the Examples" of the Application – the very examples discussed above that have mixtures of ionomer resin grades making up the ionomer resin of the cover. D.I. 229, Ex. K at p.2.

Lastly, Acushnet's argument that Bridgestone "explicitly distinguished the claims over … "(1) … 'Saito '924' … which teaches a cover including 65-97% of an ionomer resin and 3-35% of a flexible resin; and (2) GB '628, which … teaches a cover including a blend of a first and a second ionorner resin" is incorrect.

During prosecution of the '817 Patent, the Patent Office issued a single Office Action rejecting claim 1 alternatively in view of U.S. Patent Nos. 4,858,924, 4,919,434, 4,858,924, 5,304,608, 5,516,110, or G.B. Patent No. 2,276,628.

Applicants overcame this rejection, not by arguing the claim was limited to one and only one ionomer resin or one grade of ionomer resin, but first by amending claim 1 as follows:

> 1. A golf ball comprising a core and a cover wherein said core and said ball has a core hardness and a ball hardness respectively, wherein said core has a distortion of 2.9 to 4.0 mm ~~core hardness expressed by a distortion of at least 2.2 mm~~ under a load of 100

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[13] Additionally, the inventors did not amend the claims to specifically recite "a single ionomer resin" or "a single ionomer resin grade," as one would expect if they intended Acushnet's construction.

> kg, the ratio of a core distortion under a load of 100 kg divided by a ball distortion under a load of 100 kg ranges from ~~said ball has a ball hardness, the core hardenss divided by ball hardness ranges from~~ 1.0 to 1.3, and said cover consists of an ionomer resin as a resin component and has a thickness of 1.3 to 1.8 mm and a Shore D hardness of up to 60.

D.I. 229, Ex. K at p.1, and by arguing:

- U.S. Patent No. 4,919,434 discloses a resin cover different from the "present cover consisting of an ionomer resin as the resin component" (D.I. 229, Ex. K at p. 4-5, emphasis in original);
- U.S. Patent No. 5,304,608 discloses a cover that is 2.2 to 2.9 mm thick different from the claimed 1.3-1.8 mm thick cover (*id.* at p. 5-6);
- U.S. Patent No. 5,516,110 discloses a ratio of core distortion and ball distortion under a load of 100 kg different from that claimed (*id.* at p. 6);
- U.S. Patent No. 4,858,924 discloses a cover formed from a mixture of "ionomer resin" and "flexible resin" different from the claimed cover of the invention that "consists of an ionomer resin as a resin component (*id.* at p.3-4, emphasis in original); and
- G.B. Patent No. 2,276,628 discloses a "combination of the cover thickness and the core distortion" different from that claimed (*id.* at p. 6-7).

Thus, the only applied references that the applicants distinguished based upon the cover composition are U.S. Patent No. 4,919,434, based on a resin different from that claimed, and U.S. Patent No. 4,858,924, which has a mixture of "ionomer resin" and "flexible resin." Neither of these arguments dictate that the phrase in dispute be limited to "only one ionomer resin" or "only one grade of ionomer resin."

Regarding G.B. Patent No. 2,276,628 ("the '628 Patent"), contrary to Acushnet's allegations, this reference was not distinguished based on the presence of two ionomer resin grades in its cover. Instead, Applicants specifically stated that the cover of the '628 Patent included a "first ionomer resin" grade and a "second ionomer resin" grade, but distinguished that Patent because the "combination of the cover thickness and the core distortion" was different from that claimed.[14] Nowhere in the Amendment do the

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[14] In distinguishing this reference, the inventor argued that GB 2,276,628 "also fails to disclose the combination of the cover thickness and the core distortion of the present golf ball." Acushnet

Applicants argue that the '628 Patent is different from claim 1 because it has two ionomer resins. In fact, by pointing out that the '628 Patent had two ionomer resin grades, and then not arguing that that is different from the claimed arrangement, plainly demonstrates that the applicants considered the '628 Patent's cover to be similar to that claimed.

4. The '791 Patent

a. "gradually increases"

Bridgestone maintains that the term "gradually increases" be afforded its plain and ordinary meaning, because no special definition of this term has been advanced in the intrinsic record related to the '791 Patent (D.I. 229, Ex. D), and because this is a simple, straightforward, term that is used in everyday parlance. It is axiomatic that terms must be given their ordinary meaning unless it is apparent that the inventor used them differently in the patent, *see Intellicall,* 952 F.2d at 1387, and that claim terms might not be technical terms of art, and may not require elaborate interpretation. *See Brown,* 265 at F.3d 1352.

Acushnet agrees that the usage of "gradually increases" in the '791 Patent is "generally consistent with the ordinary meaning of the term." D.I. 230 at 22. Rather than stopping at this point, as it should, Acushnet proceeds to revise the ordinary meaning using extrinsic evidence.

First, ignoring Federal Circuit precedent, Acushnet relies on extrinsic evidence to define this term as "[h]aving a slope which increases and is not steep or abrupt." Acushnet does not contend that this phrase is found in any intrinsic evidence related to the '791 Patent, because no such evidence exists. Instead, Acushnet acknowledges that its definition is "derived" from extrinsic evidence, in this case the following dictionary definition:

> Of a process: Taking place by degrees; advancing step by step; slowly progressive. Of a slope: Gentle, not steep or abrupt

1. focuses on the word "also," seemingly alleging that "also" refers to the preceding paragraph in which the inventor explains that GB 2,276,628 has an ionomer resin cover made from a blend of two resin grades. This is not the case. The "also" refers to the inventors' earlier arguments that other references failed to disclose the claimed "cover thickness" and "core distortion."

D.I. 230 at 22. Evidently, not content with the definition, Acushnet then proceeds to argue that its definition actually means:

> [t]he claim limitation requires the core profile to have a hardness which increases gradually and does not change its value or direction in a steep or abrupt way. Thus, the hardness gradient must increase smoothly from the center to the surface without any abrupt changes in value or direction.

D.I. 230 at 22. None of this language can be found in the intrinsic evidence related to the '791 Patent. The '791 Patent never indicates that a "gradually increasing" hardness gradient has: (1) "an increasing slope;" (2) a non-abrupt or non-steep slope; or (3) a "smooth" slope. All of these unclaimed limitations are made up from attorney argument, which is not evidence. *See, e.g., In re Budge Mfg. Co.*, 857 F.2d 773, 776 (Fed. Cir. 1988), *Johnston v. IVAC Corp.*, 885 F.2d 1574, 1581 (Fed. Cir. 1989).

Furthermore, Acushnet's proffered definition includes such words as "steep" and "abrupt." These terms do not add any further clarity to "gradually increases." Rather, these terms are just alternative words of degree.

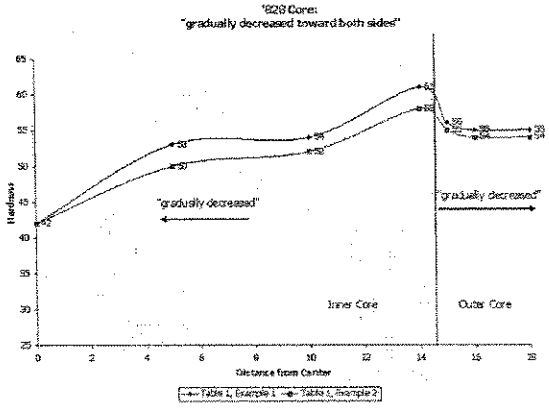
Turning to the intrinsic record, claim 1 recites that the core "has a hardness which gradually increases radially outward from the center to the surface thereof." Neither claim 1 nor any claim dependent therefrom further defines "gradually increases." The specification utilizes "gradually increases" without further definition, except to indicate that a core hardness that "gradually increases" includes embodiments where "the core has a higher hardness at the surface than at the center" and that a gradient of less than 22 can be gradual. *See, e.g.*, D.I. 229, Ex. D, col. 1:41-43; col. 2:7-8; and col. 3:26-28. If the phrase is used consistent with its ordinary meaning as even Acushnet concedes, then why must this phrase be reworded and further limited?

Next, Acushnet misconstrues the prosecution history to allege that "the applicant distinguished two prior art references based on the 'gradually increasing' feature of the core." In the January 29, 2003 Amendment, the Applicant stated that the Examiner "acknowledges on page 3" that U.S. Patent No. 6,336,872 does not teach a "gradually increasing" hardness, but did not affirmatively state that such was the case. D.I. 229, Ex. O at 7:18-20. The Applicant did distinguish a "gradually increasing" hardness

from U.S. Patent No. 5,803,833's hardness gradient that decreases "from 4 mm from the core's surface to 2 mm from the core's surface." *Id.* at 7:21-23. In other words, a fluctuating hardness. Acushnet categorizes this fluctuating hardness gradient as "abrupt," but Applicants did not use such language to distinguish U.S. Patent No. 5,803,833 from claim 1 of the '791 Patent.

Acushnet also relies on an unapplied reference, U.S. Patent No. 5,184,828 ("the '828 Patent), which discloses a core with a hardness peak at a midpoint of the core, and with a hardness that is "gradually decreased" toward the center and surface. Examples of such hardness values are shown in Table 1 in the '828 Patent, and Acushnet utilizes these values to create a chart. D.I. 230 at 24.

Acushnet's chart is reproduced here for convenience. Bridgestone does not take a position on the accuracy of this graphical representation (because it is unclear how it was produced), but believes that any of the decreasing profiles shown in this chart are exemplary of the plain and ordinary meaning of "gradual."



b. "a hardness at the center and a hardness at the surface thereof which is greater than the hardness at the center thereof."

The issue with respect to this term is whether Acushnet's attempt to import limitations from the specification and other claims is proper, or whether the clear language of the term controls.

Bridgestone proposes that this term, which is found in independent claims 13 and 24, be afforded its plain and ordinary meaning, because no special definition of this term has been advanced in the intrinsic record related to the '791 Patent. *Intellicall,* 952 F.2d at 1387.

Acushnet seeks to add a limitation to this term (and thereby to claims 13 and 24) that is found only in claim 1 - that the core hardness "gradually increases radially outward." Acushnet does not allege that this limitation needs to be added because the disputed term is in any way ambiguous. Instead,

Acushnet bases its entire argument on one Federal Circuit case – *Inpro II Licensing, S.A.R.L., v. T-Mobile USA, Inc.*, 450 F.3d 1350 (Fed. Cir. 2006) – and a misreading of the intrinsic evidence. Acushnet's proposed construction violates at least four fundamental tenants of claim construction.

First, Acushnet's proposed addition of a limitation to the disputed term is just that: an addition of a limitation. It does not offer a clarifying definition for any of the words in the disputed term. This violates the tenants that Courts "are powerless to rewrite the claims and must construe the language of the claim at issue based on the words used," *SRAM Corp. v. AD-II Eng'g, Inc.*, 465 F.3d 1351 (Fed. Cir. 2006), and that there is a "'heavy presumption' that [the claims] mean what they say." *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004).

Second, if Acushnet's proposed addition of a limitation to the disputed term is accepted, it would rewrite claim 13 so that claims 1 and 13 would have an identical scope. This runs afoul of the tenant that there is a "presumption that each claim in a patent has a different scope." *Curtiss-Wright Flow Control Corp. v. Velan, Inc.*, 438 F.3d 1374, 1380 (Fed. Cir. 2006).

Third, because Acushnet's proposed addition of the "gradually increasing" limitation to the disputed term would eliminate the varying scope of claims 1 and 13 of the '791 Patent, this proposal runs afoul of the basic tenet that inventors may "provide claims that vary in scope and in content, including some elements of a novel device or method, and omitting others." *Reiffin v. Microsoft Corp.*, 214 F.3d 1342, 1347 (Fed. Cir. 2000). In this case, even Acushnet concedes that the '791 patent specification identifies two elements of a novel core hardness, "the broader requirement that the core have a higher hardness at the surface than at the center, and the narrower requirement that the hardness be gradually increasing." D.I. 230 at 25. Here, the '791 Patent has claims of varying scope, with claim 13 reciting the broader element and omitting the narrower element, while claim 1 recites the narrower elements.

Fourth, as discussed below, the "gradually increasing" limitation that Acushnet seeks to add into the disputed term is part of an embodiment of the '791 Patent. This violates the tenant that "it is improper to read limitations from a preferred embodiment described in the specification -- even if it is the only

embodiment – into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited." *Liebel-Flarsheim* 358 F.3d at 913 (Fed. Cir. 2004).

Next, Acushnet cites *Inpro*, 450 F.3d at 1355-56 for the proposition that a broad claim must be construed to include a limitation identified in the specification as a "very important feature." D.I. 230 at 26. Acushnet then alleges that "the specification and prosecution [of the '791 Patent] make it clear that it is critical to the invention that the hardness profile gradually increase." D.I. 230 at 25. Thus, Acushnet concludes that the phrase "gradually increases" must be included in all of the independent claims of the '791 Patent.

Inpro, however, is not on point. In *Inpro*, the Federal Circuit considered whether the term "host interface" in U.S. Patent No. 6,523,079 (the '079 Patent) could include both a "serial bus" and a "parallel bus". The '079 Patent indicated that the use of a "serial bus" in prior art systems is a drawback, and that a "parallel bus" was a "very important feature" of the invention. *Inpro,* 450 F.3d at 1354. Further, during prosecution, the patentee argued that it narrowed the claim scope, so that "it does not read on series connections." *Id.* at 1356 (emphasis added). In view of all of these factors, the Federal Circuit upheld the district court's determination that "host interface" could only include a "parallel bus," and not a "serial bus."

Thus, *Inpro* stands for the logical proposition that, if an inventor expressly narrows the scope of a disputed term by indicating that his claims do not read on a feature, than the claims should not be construed to include that feature. The instant situation is completely different, because the inventor of the '791 Patent did not further limit the breadth of the disputed term in the specification.[15]

Further, Acushnet's argument that "the specification and prosecution [of the '791 Patent] make it clear that it is critical to the invention that the hardness profile gradually increase" (D.I. 230 at 25) is also incorrect. The '791 Patent is directed in part to a golf ball core that has an "optimized hardness profile."

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[15] See D.I. 229, Ex. D, col. 2:10-11 ("a specific hardness difference between the surface S and the center C"), D.I. 229, Ex. D, col. 3:30-31 ("the core has a higher hardness at the surface than at the center") and D.I. 229, Ex. D, col. 3:32-35 ("[t]he core center and surface must have a difference between their respective measured JIS-C hardnesses").

D.I. Ex. D cols. 2:11-13, 3:27, 4:2-3, and 5:29-31. When the '791 Patent is read in its entirety, it is clear that this "optimized hardness profile" necessarily includes the feature of a specific difference in hardness between the center and surface (*e.g.*, *see* D.I. 229, Ex. D at 3:31-57), but not a hardness that "gradually increases" (*e.g.*, *see* D.I. 229, Ex. D at 4:3-4).

Acushnet's arguments are based on the '791 Patent's indication that:

> It is critical for the core to have an optimized hardness profile in which the hardness gradually increases radially outward from the center toward the outside edge or surface of the core. That is, the core has a higher hardness at the surface than at the center.

(D.I. 229, Ex. D, col. 3:26-31). Acushnet argues that this section indicates that it is "critical" to have a gradually increasing hardness. While Bridgestone agrees that this section states that it is "critical" to have an "optimized hardness profile," it disagrees that it is also "critical" or necessary for the hardness to "gradually increase." Rather, a gradually increasing hardness is simply a preferred embodiment of the "optimized hardness profile," as is clear from the remainder of the specification. For example, the '791 Patent also indicates that:

> Since the core has a hardness gradually increasing radially outward from the center to the surface thereof and an optimized difference in hardness between the center and the surface where the core is hardest …

(D.I. 229, Ex. D, col. 4:1-5, emphasis added). This section clearly indicates that the gradually increasing hardness and the "optimized" difference in hardness are two different things. Further, the '791 Patent also indicates that:

> [t]he core center and surface must have a difference between their respective measured JIS-C hardnesses of at least 18, preferably at least 20, and most preferably at least 22 units.

(D.I. 229, Ex. D, col. 4:1-5). This section indicates that the invention "must" have a hardness difference, but does not indicate that it "must" also have a gradually increasing hardness between its center and surface.

In view of a reading of the specification of the '791 Patent read in its entirety, it is clear that what is "critical" to the invention is the "optimized hardness profile," and that the "optimized hardness profile"

must include a specific hardness difference between the center and surface, but does not necessarily include a gradually increasing hardness.

The prosecution history does not lead to a different conclusion. While Acushnet argues that "the patentee has distinguished prior art on the grounds that it did not teach a gradually increasing hardness profile" in the January 29, 2003 Amendment (D.I. 230 at 26:9-13), that is not the case. The inventor actually distinguished only claim 1 from the applied references because they failed "to teach a core which 'gradually increases radially outward from the center to the surface thereof.'" D.I. 229, Ex. O at 7:17-18. Only claim 1 recites that quoted language. The inventor did not distinguish claims 13 and 24 on this basis, because claims 13 and 24 do not include that quoted language.

Further, during prosecution, the Examiner did not require that the inventor add the "gradually increasing" hardness limitation to independent claims 13 and 24. Thus, even the Examiner did not believe that this feature was "critical" to the invention.

Accordingly, the Court should not adopt Acushnet's proposed construction. Rather, the language "a hardness at the center and a hardness at the surface thereof which is greater than the hardness at the center thereof" should be construed according to its plain and ordinary meaning.

5. The '961 Patent

In the '961 Patent (D.I. 229, Ex. E), the parties dispute the meaning of several terms involving measurements. Bridgestone proposes that each of these terms simply be afforded its plain and ordinary meaning, as each term would be understood by one of skill in the art. It is axiomatic that terms must be given their ordinary meaning unless it is apparent that the inventor used them differently in the patent. *Intellicall,* 952 F.2d at 1387. Acushnet does not allege that one of skill in the art would consider the disputed terms unclear or ambiguous. Rather, Acushnet seeks to rewrite the disputed terms by importing language from the specification – thereby saddling these terms with unnecessary definitions that would not provide any further clarity for one of skill in the art.

a. "having a viscosity η at 25°C as a 5 wt % solution in toluene of up to 600 mPa·s"

Bridgestone maintains that this term should be afforded its plain and ordinary meaning because no special definition of this term has been advanced in the '961 Patent.

Acushnet does not assert that this term is ambiguous. Rather, Acushnet argues that the "patentees specifically defined this claim language and in so doing informed the public exactly what they intended their claim language to mean." Thus, Acushnet proposes to unnecessarily complicate this term by defining it as follows:

> having a viscosity η of 600 milli Pascal seconds or less. The viscosity being defined by the specification of the '961 Patent to be measured "in mPa·s units" and being "obtained by dissolving 2.28g of the polybutadiene to be measured in 50 ml of toluene and carrying out measurement with a specified viscometer at 25°C using a standard solution for the viscometer (JIS Z8809)."

D.I. 230 at 13:3-8. Acushnet's proposed construction is improper and unnecessary.

Claim 1 recites "having a viscosity η at 25°C as a 5 wt % solution in toluene of up to 600 mPa·s." This term is clear and definite to one of skill in the art, as the language provides sufficient information necessary to measure "viscosity." Additional details imported from the specification are not required.

The specification indicates that:

> "Viscosity η at 25°C as a 5 wt % solution in toluene" refers herein to the value in mPa·s units obtained by dissolving 2.28 g of the polybutadiene to be measured in 50 ml of toluene and carrying out measurement with a specified viscometer at 25°C using a standard solution for the viscometer (JIS Z8809).

D.I. 229, Ex. E, col. 3:5-13. This defines a manner in which viscosity can be measured. However, the '961 Patent does not specify that this is the only method compatible with the invention, or that it is absolutely necessary to the invention to measure viscosity in this manner.

Thus, Acushnet's proposed construction is improper, and Bridgestone requests that the Court afford this term its plain and ordinary meaning.

b. "base rubber composed of (a) 20 to 100 wt % of a polybutadiene… satisfying the relationship: $10B+5 \leq A \leq 10B+60$, wherein A is the Mooney viscosity (ML_{1+4} (100°C)) of the polybutadiene and B is the ratio Mw/Mn between the weight-average molecular weight Mw and the number-average molecular weight Mn of the polybutadiene"

Bridgestone proposes that this term be afforded its plain and ordinary meaning, because no special definition has been advanced in the '961 Patent.

Acushnet does not assert that this term is ambiguous. Rather, Acushnet argues that the "the claim language uses technical terms, … as well as technical notation," that "the specification defines the terms and notations," and that "it is appropriate to give the jury the benefit of these definitions." Thus, Acushnet proposes to complicate this term by adding the following definition lifted from the specification:

> [t]he base rubber composed of (a) 20 to 100 wt % of a polybutadiene that has the relationship: 10 times the polydispersity plus 5 is less than or equal to the Mooney viscosity which is less than or equal to 10 times the polydispersity plus 60. The term polydispersity means the ratio of the weight average molecular weight (Mw) to the number average molecular weight (Mn). As defined in the specification, "M" in the term (ML_{1+4} (100°C)) stands for Mooney viscosity, "L" stands for large rotor..., "1+4" stands for a preheating time of 1 minute and a rotor rotation time of 4 minutes, and "100°C" indicates that the measurement was carried out at a temperature of 100°C.

(emphases added). However, Acushnet's proposed construction is improper and unnecessary.

This term is clear on its face, and recites a simple equation ("$10B+5<A<10B+60$") utilizing variables A ("Mooney viscosity") and B ("the ratio Mw/Mn"). This term is clear and definite to one of skill in the art, as the language provides sufficient information necessary to determine the composition of the "base rubber." Additional details from the specification are not required.

The specification of the '961 Patent defines "Mooney viscosity" as follows:

> The term "Mooney viscosity" used herein refers in each case to an industrial index of viscosity as measured with a Mooney viscometer, which is a type of rotary plastometer (see JIS K6300). This value is represented by the symbol ML_{1+4} (100°C), wherein "M" stands for Mooney viscosity, "L" stands for large rotor (L-type), "1+4" stands for a

> pre-heating time of 1 minute and a rotor rotation time of 4 minutes, and "100°C" indicates that measurement was carried out at a temperature of 100°C.

D.I. 229, Ex. E, col. 3:46-55. This defines a manner in which Mooney viscosity can be measured. However, the '961 Patent does not specify that this is the only method compatible with the invention, or that it is absolutely necessary to the invention to measure Mooney viscosity in this manner.

Acushnet's proposed construction also fails because:

- it seeks without explanation to rewrite simple mathematical symbols (e.g., as "+" and "≤") with words (e.g., "plus" and "less than or equal to"); and
- it seeks without explanation to define the claim term "the ratio Mw/Mn" as "polydispersity," which is not specifically discussed in the '961 Patent and is not believed to be an actual property known in the art.[16]

Thus, Acushnet's proposed construction is improper, and Bridgestone requests that the Court afford this term its plain and ordinary meaning.

c. "(b) 0 to 80 wt % of a diene rubber other than component (a)"

Bridgestone proposes that this term be afforded its plain and ordinary meaning. Acushnet does not argue that this term is ambiguous. Rather, Acushnet argues that its "construction clarifies two important points with respect to this claim limitation" and "provides more clarity for the jury." Thus, Acushnet proposes to complicate this term by rewriting it as:

> [a] diene rubber, different from diene rubber (a), that if present, is present in an amount not more than 80% by weight of the total rubber composition.

Acushnet's paraphrasing of this disputed term is improper and unnecessary. This term is clear on its face, and is described in a similar manner in the specification. There is no need to rewrite it.

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[16] The term "polydispersity index" is currently known in the art (D.I. 229, Ex. P) and is discussed in the '961 Patent itself (D.I. 229, Ex. E, Abstract).

Acushnet's arguments for rewriting this term are not persuasive. Acushnet first argues that its construction "clarifies that the diene rubber does not have to be present at all." D.I. 230 at 15:2-23. However, that is not the case here. Acushnet's definition would actually add ambiguity to this case, because it is claim 2 that is asserted by Bridgestone against Acushnet, and claim 2 requires the presence of diene rubber (b).

Acushnet also argues that its "definition also clarifies that the diene rubber (b), if present, cannot be present in more than 80% by weight of the total rubber composition." This is also unnecessary, as the disputed term is quite clear on its face – "to 80%."

Thus, Acushnet's proposed construction is improper, and Bridgestone requests that the Court afford this term its plain and ordinary meaning.

d. "which has a cis-1,4 content of at least 60% and a 1,2 vinyl content of at most 5%, has a Mooney viscosity (ML_{1+4} (100° C)) of not more than 55, and satisfies the relationship: $\eta \leq 20A-550$, wherein A is the Mooney viscosity (ML_{1+4} (100° C)) of the second polybutadiene and η is the viscosity of the second polybutadiene, in mPa·s, at 25°C as a 5 wt % solution in toluene."

Bridgestone proposes that this term in claim 2 be afforded its plain and ordinary meaning, for reasons identical to those discussed for term (b) above.

B. THE ACUSHNET PATENTS-IN-SUIT

1. The '861, '587 and '367 Patents

a. "edge"

Bridgestone proposes that "edge" in the '861, '587 and '367 Patents (D.I. 229, Exs. F, G and H, hereinafter the "Dimple Patents") be construed in the same manner in which it is defined in both the claims and specification: "[t]he point of intersection of the periphery of the golf ball or its continuation and a tangent to the sidewall of the dimple at a point 0.003 inches below the periphery of the golf ball or its continuation." This definition is taken *verbatim* from the claims and specifications of the Dimple

Patents. *See* D.I. 229, Ex. F, col. 6:17-19 and col. 10:45-50; D.I. 229, Ex. G, 5:66-68 and col. 9:62-66 and col. 13:47-52; and D.I. 229, Ex. H, col. 6:3-5 and col. 9:66 to col. 10:2.

Acushnet concedes that "[t]he claims in the three patents define 'the edge of the dimple' as 'the point of intersection of the periphery of the golf ball or its continuation and a tangent to the sidewall of the dimple.'" D.I. 230 at 36 (emphasis added). Acushnet does not allege that the claims' definition of "edge" is in any way ambiguous. Nevertheless, Acushnet proposes to rewrite the clear claim language by deleting the words "the point," and attempts to support such a rewriting by alleging that:

> [b]ecause the dimples on a golf ball, however, are not mere cross-sections, the edge of the dimple as a whole is the sum of all such intersections, which collectively circumscribe the dimple on the outer surface of the golf ball. ... Bridgestone's suggested definition of the edge as "the point of intersection" simply repeats the language of the claim, but misses the nuanced difference between the dimple edge in cross-section versus the dimple edge as a whole.

D.I. 230 at 37:8-12 (emphasis added). Acushnet proffers an argument that, despite the fact that Bridgestone's definition uses the claim language itself, the Court should rewrite the claims because of a "nuance" that has somehow been missed. Bridgestone disagrees.

No "nuance" has been missed in Bridgestone's proposed definition, or the applicant's express definition of "edge" in the claims. Although Bridgestone generally agrees that dimples are circular when viewed from above, that is not the feature the Dimple Patents are claiming. The Dimple Patents are directed to specifying distances between "closest points" on "edges of adjacent dimples." Thus, it is only necessary for the edge of the dimple to be defined as a point, which is exactly what the claims of the Dimple Patents do. For example, claim 1 of the '587 Patent recites:

> 1. A finished golf ball which has from 182 to 392 dimples in the outer periphery thereof, the placement of the dimples being such that at least 80% of the distances between the closest points of the edges of adjacent dimples is less than 0.065 inches, and at least 55% of the distances between the closest points of the edges of adjacent dimples is greater than 0.001 inches, the edge of the dimple being defined as the point of intersection of the periphery of the golf ball or its continuation and a tangent to the sidewall of the dimple at a point 0.003 inches below the periphery of the golf ball or its continuation, and wherein

> combinations of the diameter D and depth d of all dimples formed on the ball are defined by the relationship: …

D.I. 229, Ex. G, col. 9:54-67 (emphasis added).[17]

The respective specifications also clearly indicate that it is a specific point of the dimple edge that is of interest, as exemplified by the portion of the '587 Patent discussing FIG. 3, which states:

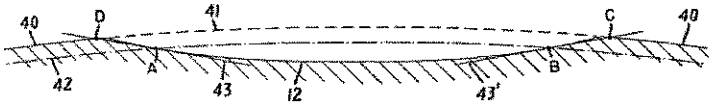

FIG. 3

> In FIG. 3 is seen in cross section a golf ball having periphery 40 and continuation thereof 41 and dimple 12. The periphery and its continuation are a substantially smooth section of a sphere. Arc 42 is about 0.003 inches below curve 40-41-40 and intersects the dimple 12 at points A and B. Tangents 43 and 43' are tangent to the dimple 12 at points A and B respectively and intersect periphery 40 at points C and D respectively. Points C and D are the edges of the dimple.

D.I. 229, Ex. G, col. 6:4-11 (emphasis added).

Another example is found in the portion of the '587 Patent that describes FIG. 6. This portion specifies that dimples "45, 46, 48 and 50 [have] … centers 52, 54, 56, and 58 respectively," and "the center point of dimples 46, 48 and 50 are joined by lines" 60, 62, and 64 to form a triangle. Further, the '587 Patent specifies that:

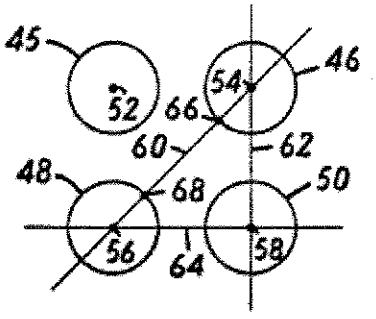

FIG. 6

> in accordance with the present invention all dimples are circular or are converted to the circular, the closest points between the two dimples on the edges of the dimple will fall on the line which passes through the center of the two adjacent dimples. The closest points at the edges between dimples 46 and 48 are edge points 66 and 68, and therefore, the critical land distance as described hereinbefore is measured between points 66 and 68 for these adjacent dimples.

D.I. 229, Ex. G, col. 6:38-56 (emphasis added).

1.
[17] Additionally, the claims in question clearly specify that "the edge of the dimple [is] defined as the point of intersection of the periphery of the golf ball or its continuation and a tangent." A tangent is a line. A line can only intersect another line at one point.

Thus, "edge" in the Dimple Patents should be construed as "[t]he point of intersection of the periphery of the golf ball or its continuation and a tangent to the sidewall of the dimple at a point 0.003 inches below the periphery of the golf ball or its continuation." This is exactly how the applicants defined this term in the claims and specifications of the Dimple Patents.

b. Claim Construction Issue Related to the '861 Patent Only

The parties disagree about the proper construction of the following emphasized language from a selected portion of claim 1 of the '861 Patent:

> 1. A method of manufacturing a golf ball having dimples in the outer periphery thereof comprising the steps of:
>
> (A) selecting a golf ball structure onto the surface of which dimples can be molded;
>
> (B) determining the dimple number, dimple diameter and dimple depth by:
>
> (a) selecting the number of dimples to be used, the said number of dimples being between 182 and 392;
>
> (b) selecting a dimple diameter and dimple depth that satisfy the following relationship:
>
> $$S=\left[\frac{831.5(d-x)-55.56(D-y)}{a}\right]^2+\left[\frac{83.15(D-y)+555.6(d-x)}{b}\right]^2$$
>
> in which…

D.I. 229, Ex. F, cols. 9:56-10:10.

Bridgestone maintains that this term is ambiguous on its face, because it is unclear whether "determining" and "satisfy the following relationship" requires the use of claim 1's "S=" equation, or whether the selected dimple diameter and depth must merely satisfy claim 1's "S=" equation. When a term is ambiguous, it should be defined.[18]

---

[18] This is the basis for requesting the Court to define this claim term, contrary to Acushnet's allegation that Bridgestone has not provided any justification for the Court to do so.

It is clear from the remaining intrinsic and extrinsic evidence related to the '861 Patent that the former is accurate – that "determining" and "satisfy the following relationship" requires the actual use of claim 1's "S=" equation. This is consistent with the prosecution history:

> [a]s recognized by the Examiner, the applicants' claims 'define the method of selecting the number of dimples, the diameter and depth of said dimples, and the subsequent step of placing said dimples on the surface of a golf ball' []. …

D.I. 229, Ex. R, p. 11 (emphasis in original); and

> [t]he critical aspect of the applicants' claimed invention is selecting the dimple number, dimple diameter, dimple depth, and dimple spacing as set forth in subsections (B) and (C) of claims 35 and 40. It is only when the method includes selection of the critical limitations according to these subsections that the advantages of the present invention are achieved.

D.I. 229, Ex. S. at p. 2 (emphasis added). These portions specify that the dimples are designed by taking into account each of the parameters recited in claim 1, thus necessarily including the use of the equation of claim 1. If this were not the case, the claimed method would merely require the forming of dimples on a ball surface, where the dimple dimensions and spacing were randomly selected, and then later making a determination if the dimple number, diameter, depth and spacing satisfy the "critical" aspects of the alleged invention in the '861 Patent.[19] That interpretation makes no sense.

In view of the above, Bridgestone seeks the clarifying definition "determining the number of dimples to be used selecting the number of dimples to be between 182 and 392 and determining the dimple diameter and depth by selecting the dimple diameter and depth using the relationship: …" (emphasis added).

Acushnet fails to address the inherent ambiguity in claim 1. Rather, Acushnet simply alleges that "the language is clear," and that the disputed term should have a "plain and ordinary meaning," without further explanation. D.I. 230 at 35:3-4.

1.
[19] Additional support for Bridgestone's proposed construction can be found in the testimony [redacted]

Additionally, Acushnet does not even cite the disputed claim language, or Bridgestone's proposed construction, properly. Acushnet first misidentifies the disputed term as:

> determining the dimple number, dimple diameter and dimple depth by: (a) selecting the number of dimples to be used, the said number of dimples being between 182 and 392; (b) selecting a dimple diameter and dimple depth …

D.I. 230 at 34:18-22. This quotation clips the "satisfy the following relationship" phrase from the disputed term. This is the exact part of the claim language that Bridgestone cites as at least partially causing the ambiguity in the claim.

Acushnet also misstates Bridgestone's proposed definition as:

> *Bridgestone's Proposed Definition*: Determining the number of dimples to be used selecting the number of dimples to be between 182 and 392 and determining the dimple diameter and depth by selecting the dimple diameter and depth

D.I. 230 at 34:24-27 (emphasis added). This quotation similarly clips the "using the relationship" phrase from the disputed term. Again, this is the exact part of Bridgestone's definition that clarifies the ambiguity in claim 1.

In any event, Acushnet's proposed construction of "plain meaning" for this term is not sufficient, due to the ambiguity in the "determining" and "satisfy the following relationship" portions of claim 1 mentioned above. Accordingly, the Court should adopt Bridgestone's proposed construction, which is the only proposed construction that removes the inherent ambiguity in the claim term.

2. The '705 Patent

In an attempt to obscure the issues related to the '705 Patent (D.I. 229, Ex. I), Acushnet repeatedly alleges that Bridgestone is attempting to "manufacture an invalidity or indefiniteness position based on its proposed" claim constructions. D.I. 230 at 31:fn 13 and 32:5-14. This is inaccurate, because both Bridgestone and Acushnet's position is that the two instances of "material" in claim 1 refer to the same "material." The dispute between the parties rests on whether that "material" refers to a cured or uncured material.

On this point, Acushnet is asking this Court to rewrite the claims of the '705 Patent because they do not recite what Acushnet now says it intended to claim, *i.e.*, that a polybutadiene has the characteristics of a molecular weight greater than 200,000 and a resilience index of greater than 40. Instead, the claims of the '705 Patent recite that the "material" has these characteristics. [redacted] Not only does this sentence constitute rank extrinsic evidence, but it does not support Acushnet's position. This case is on all fours with *Chef America, Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371 (Fed. Cir. 2004) and the same result should apply.

a. "a material farmed [sic] from the conversion reaction of at least a cis-to-trans catalyst and a polybutadiene"

Bridgestone and Acushnet agree that this limitation covers a cured material (D.I. 230 at 29) and that the material resulting from the conversion reaction is a mixture of the cis-to-trans catalyst and polybutadiene. However, Acushnet goes further on to contend that this limitation may also cover simply an uncured material. This is where the dispute lies. Acushnet has absolutely no support for its position that this limitation covers an uncured polybutadiene. In fact, the position strains credibility.

The disputed limitation requires that the material be formed from a "conversion reaction," of the cis-to-trans catalyst and polybutadiene; it seems obvious that at a minimum the cis-to-trans catalyst must be mixed with the polybutadiene. However, there is no indication in the '705 Patent that simply mixing these components, without more, results in any "conversion reaction." Instead, as explained in the '705 Patent, the conversion reaction takes place during the molding of the golf ball core (see below) by the application of heat to the mixture of the cis-to-trans catylst and the polybutadiene. By applying heat, the reaction occurs, resulting in a conversion of cis-isomers to trans-isomer. Even Acushnet agrees that the "material" may be a cured material. D.I. 230 at 29.

But, Acushnet's argument that this resulting material may also cover an uncured polybutadiene is inaccurate, and is based on mere attorney argument that ignores the claim language requiring a "conversion reaction" as well as the '705 patent specification. Acushnet cites no intrinsic evidence that supports such a position, because there is none. Nor does Acushnet even cite publicly-available extrinsic evidence to support its position. [redacted] There can be no dispute that extrinsic evidence cannot be used to alter the meaning of a disputed claim term.

Acushnet's unsupported allegations and its resort to extrinsic evidence cannot overcome the great weight of the intrinsic evidence supporting Bridgestone's definition.

First, Claim 1 of the '705 patent is directed to a completed golf ball (*i.e.*, one that is ready to use) having a "center," "inner cover layer," and "outer cover layer." A completed ball must have a cured rubber core – otherwise it would be mush, and non-useable. Even Acushnet admits that completed centers of golf balls have been "polymerized," or "cured." D.I. 230 at 3 and 21. Indeed, Acushnet's argument that the "material" can somehow be "uncured" would have the absurd result that claim 1 could be read as "a golf ball comprising: a center comprising an uncured material." Golf ball centers do not include uncured materials. D.I. 230 at 21.

Acushnet's argument also runs counter to the specification of the '705 Patent, which discloses :

1. Indeed, Acushnet only cites one page of [redacted] In any event, none of these processes are disclosed anywhere in the '705 Patent, and Acushnet has not cited one single piece of intrinsic or publicly available extrinsic evidence that indicates that persons of ordinary skill in the art would recognize that the "conversion reaction" could include a test such as is shown in this lab notebook.

> [t]he center further includes a material formed from a conversion reaction of polybutadiene having a first amount of trans-polybutadiene, a free radical source, and at least one cis-to-trans catalyst.

D.I. 229, Ex. I, col. 6:36-40 (emphasis added). The '705 Patent does not expressly define the phrase "conversion reaction," but does provide:

> The invention also includes a method to convert the cis-isomer of the polybutadiene resilient polymer component to the trans-isomer during a molding cycle and to form a golf ball.

D.I. 229, Ex. I, col. 11:61-65 (emphasis added). This clearly indicates that the "method to convert" is performed during a molding cycle. Golf balls cores cure during a molding cycle, as Acushnet agrees. D.I. 230 at 2, 3 and 21. Still further, the '705 Patent discloses:

> To produce a polymer reaction product that exhibits the higher resilience and lower modulus (low compression) properties that are desirable and beneficial to golf ball playing characteristics, high-molecular-weight cis-1,4-polybutadiene, preferably may be converted to the trans-isomer during the molding cycle.

D.I. 229, Ex. I, col. 12:23-28 (emphasis added). This again emphasizes that the polybutadiene is converted to trans-isomer "during the molding cycle."

Moreover, the '705 Patent specifically compares the percentage of trans-isomer pre-cure and post-cure to determine the effectiveness of its process. D.I. 229, Ex. I, col. 28:14-18. Such a comparison is shown in detail in Table 3, which shows the effect of the invention measured in "% Trans BR isomer Precure" and "% Trans BR isomer Postcure." D.I. 229, Ex. I, col. 27,28 (emphasis added). This again specifies that it is the curing process that provides the increased % trans amount that is the focus of the purported invention.

[redacted]

[redacted] And again, in Acushnet's opening brief it admits golf balls have cured rubber cores.

In view of all of the above, it is clear that the "material" in this term is a "cured material," and that this term should be defined as "a cured product formed from the conversion reaction of at least a cis-to-trans catalyst and a polybutadiene."

b. "the material has a molecular weight of greater than about 200,000 and a resilience index of at least about 40"

This term requires the "material," not polybutadiene as Acushnet contends, to have a molecular weight of greater than about 200,000 and a resilience index of at least about 40. *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004) (there is a "'heavy presumption' that [the claims] mean what they say").

Although Bridgestone would normally accept a plain and ordinary meaning of this term (because it is relatively straightforward), such a definition here would only add to the ambiguity created by Acushnet's unsupported argument that the claim requires the "polybutadiene" to have the characteristics of a molecular weight of greater than about 200,000 and a resilience index of at least about 40. Thus, Bridgestone proffers that this term be defined as "'the material' refers to 'a material' appearing earlier in the claim and discussed above, and that it is the material which has a molecular weight of greater than about 200,000 and a resilience index of at least about 40."

Bridgestone's proposed definition maintains the claim wording, and emphasizes that "the material" finds its antecedent basis by the first instance of "a material" – the "cured product" or the mixture of the polybutadiene and cis-to-trans catalyst having undergone a conversion reaction discussed above. *Warner-Lambert Co. v. Apotex Corp.*, 316 F.3d 1348, 1356 (Fed. Cir. 2003).

Acushnet cites to the '705 patent in an attempt to support its position. *See* D.I. 230 at 30-31. While the '705 patent does say that the polybutadiene has a resilience index of greater than 40 and a molecular weight of greater than 200,000, this language is not sufficient to rewrite what is otherwise clear, unambiguous claim language and the claims should not be redrafted.[21] The claims mean exactly what they say. *Chef America*, 358 F.3d at 1373.

---

[21] Additionally, Acushnet's position does not comport with their accusation that "a material" in line 2 of claim 1 should somehow be read as an "an uncured blend of a cis-to-trans catalyst and a polybutadiene," as the second "material" would then necessarily also be the "blend of a cis-to-trans catalyst and a polybutadiene," not just a "polybutadiene." Acushnet cites no portion of the '705 Patent that discloses molecular weight or resilience index values for an "uncured blend of a cis-to-trans catalyst and a polybutadiene."

Moreover, the intrinsic record is replete with support for Bridgestone's construction that the "material" in the disputed term is formed from the conversion reaction, and is not just polybutadiene or uncured polybutadiene. For example, the '705 patent provides:

- "To produce a polymer reaction product that exhibits the higher resilience and lower modulus (low compression) properties that are desirable and beneficial to golf ball playing characteristics, high-molecular-weight cis-1,4-polybutadiene, preferably may be converted to the trans-isomer during the molding cycle. The polybutadiene material typically has a molecular weight of greater than about 200,000." (D.I. 229, Ex. I, col. 12:23-30);

- "[t]he cured resilient polymer component, which contains a greater amount of trans-polybutadiene than the uncured resilient polymer component, is formed into an article …" D.I. 229, Ex. I, col. 17:57-60);

- "the reaction product has a molecular weight of greater than about 200,000" (D.I. 229, Ex. I, col. 34:6-9); and

- "the material has a molecular weight of greater than about 200,000 and a resilience index of at least about 40" (D.I. 229, Ex. I, col. 34:45-47).

The '705 prosecution history further demonstrates that the patentee intended the "material" to have a resilience index of at least about 40. In the May 25, 2004 Response, Acushnet traversed the Examiner's rejections of the claims on prior art rounds, arguing:

- "Moriyama '396 is silent, however, as to the resilience index of the center material, as presently recited in independent claim 1 and new independent claim 29" (Ex. G at p. 7, emphasis added);

- "In fact, Dewanjee, like Moriyama '396, is completely silent as to the resilience index of the core material." (*id.*, emphasis added);

- "It appears that the Examiner also recognizes the deficiencies of the cited references with respect to the resilience index of the center material in light of the absence of §§ 102 and 103 rejections of claim 3, as previously recited." (*id.* at p. 7, fn 1, emphasis added);

- "Like rewritten independent claim 1, independent claim 29 also recites a resilience index for the center material, which is lacking from the cited references. " (*id.* at p. 9, emphasis added);

Thus, intrinsic evidence from both the '705 patent and its prosecution history amply demonstrates Bridgestone's construction is proper.

The Federal Circuit has long ago settled that courts may not redraft claims whether to make them operable or to sustain their validity. *Chef America*, 358 F.3d at 1374. The instant claim recites a clear and unquestionable relationship. The words mean exactly what they say – the core of the golf ball includes a converted product, and the converted product has a particular molecular weight and resilience index. Thus, the Court should construe this claim as it is written, and not as Acushnet wishes they had written it. *Id.*

In view of the above, from the plain language of the claim, one of ordinary skill would have understood both instances of "material" in claim 1 as referring to the same cured reaction product of at least a cis-to-trans catalyst and a polybutadiene.

c. "resilience index"

Both parties agree that "Resilience Index" was not known in the art prior to the issuance of the '705 Patent, and is a term coined by Acushnet. It is axiomatic that, if a disputed term has "no previous meaning to those of ordinary skill in the prior art[, its] meaning, then, must be found [elsewhere] in the patent." *J.T. Eaton & Co., Inc. v. Atlantic Paste & Glue Co.*, 106 F.3d 1563, 1570 (Fed. Cir. 1997). Thus, both parties agree that this term requires a definition, and that the definition should take into account the following portion of the specification of the '705 Patent:

> As used herein the term "resilience index" is defined as the difference in loss tangent measured at 10 cpm and 1000 cpm divided by 990 (the frequency span) multiplied by 100,000 (for normalization and unit convenience).
>
> * * *
>
> The computation of resilience index is as follows:
>
> Resilience Index = 100,000·[(loss tangent@10 *cpm*)-(loss tangent@1000 *cpm*)]/990

D.I. 229, Ex. I, col. 11:13-26 (emphasis added). The parties disagree as to the extent of the textual description from this portion necessary to adequately define "resilience index."

Bridgestone agrees with Acushnet's citation of *Merck* for the proposition that, when a term is not known in the art, an applicant's definition should control. In this instance, the applicant identically defined "resilience index" twice in the emphasized portions of the above section. As such, Bridgestone submits that this is the clear, deliberate, and precise definition. *Id.* at 1370.

Acushnet argues that "Bridgestone's proposed definition fails because it ignores a substantial portion of the express definition provided by the inventors" – the indication that:

> The loss tangent is measured using an RPA 2000 manufactured by Alpha Technologies of Akron, Ohio. The RPA 2000 is set to sweep from 2.5 to 1000 cpm at a temperature of 100° C using an arc of 0.5 degrees. An average of six loss tangent measurements were acquired at each frequency and the average is used in calculation of the resilience index.

D.I. 229, Ex. I, col. 11:16-26. In other words, Acushnet seeks to specify a particular machine – the RPA 2000 – to measure loss tangent. Such a definition is unnecessary, because there is no specific indication that only the RPA 2000 is capable of measuring loss tangent in accordance with the '705 Patent. Rather, as Acushnet concedes, there are many different machines that are capable of measuring loss tangent.[22] In fact, the '705 Patent itself indicates that another value, "dynamic stiffness," can be measured "using a Dynamic Mechanical Analyzer, Model DMA 2980 available from TA Instruments Corporation of New Castle, Del.," and that the "instrument utilized for measuring 'dynamic stiffness' may also be used to measure loss tangent." D.I. 229, Ex. I, col. 9:55-10:13 (emphasis added).

Accordingly, the RPA 2000 should be considered exemplary of those machines, and thus should not be imported into the Court's definition. *Electro Scientific Indus. v. Dynamic Details, Inc.*, 307 F.3d 1343, 1349 (Fed. Cir. 2002). Acushnet's position is akin to arguing that a length should not be measured by different brands of rulers – it is a distinction without a difference, and adds nothing but complication to the proposed definition.

1. [redacted]
22

V. CONCLUSION

The claim construction advanced by Bridgestone is well-grounded in the intrinsic evidence. In stark contrast, Acushnet largely ignores the intrinsic evidence in its proposed constructions and relies on unsupported definitions without regard to the context of the terms, both as they are used in the claims and described in the specification. Accordingly, the Court should adopt Bridgestone's construction of the disputed claim terms in the patents-in-suit as set forth above, and reject Acushnet's construction of those terms.

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CERTIFICATE OF SERVICE

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